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REPORT OF CONFERENCE ASSEMBLED TO CONSIDER RECOMMENDATIONS RELATIVE TO A POSSIBLE REVIEW AND ASSESSMENT OF RESEARCH AND DISSEMINATION PROJECTS CONDUCTED UNDER TITLE VII OF THE NATIONAL DEFENSE EDUCATION ACT OF 1958.

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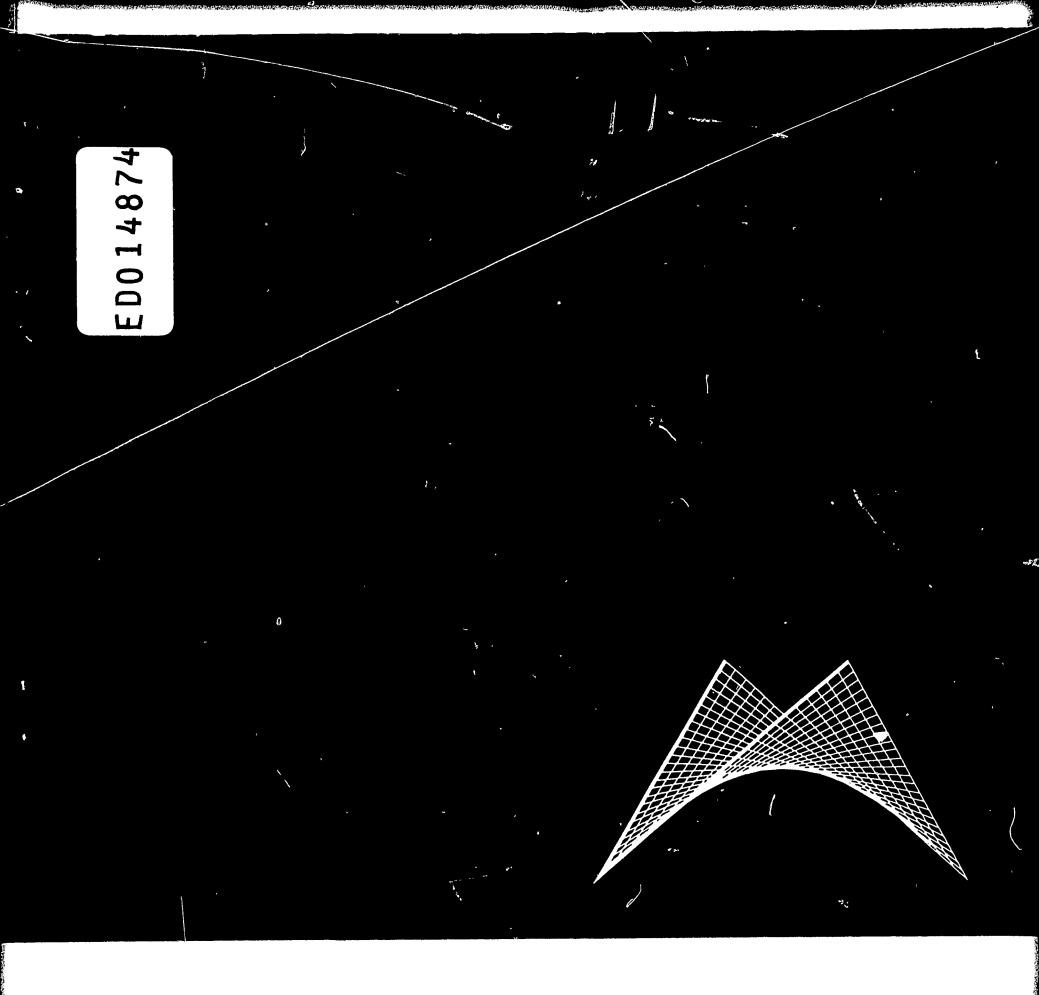
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THIS REPORT SUMMARIZES THE RECOMMENDATIONS OF A CONFERENCE WHICH MET TO CONSIDER WHETHER THE U.S. OFFICE OF EDUCATION SHOULD UNDERTAKE AN ASSESSMENT OF THE IMPACT OF ITS TITLE VII PROGRAM ON AMERICAN EDUCATION. IT IS RECOMMENDED THAT SUCH AN EFFORT INCLUDE AN OVERVIEW OF THE ENTIRE FIELD OF EDUCATION, WITH FOCUS ON THE FIELD OF EDUCATIONAL MEDIA. TO BE OF MAXIMUM VALUE, THE ASSESSMENT SHOULD BE COMPLETED AS QUICKLY AS POSSIBLE. A PROPOSED STUDY IS OUTLINED IN 2 PARTS. THE FIRST PART SUGGESTS WORK TO BE DONE--(1) AN OVERVIEW OF EDUCATION, WITH RECOMMENDATIONS FOR FUTURE DEVELOPMENTS, (2) AN ANALYSIS OF THE CURRENT STATUS OF EDUCATIONAL MEDIA, AND (3) AN ANALYSIS OF TITLE VII RESEARCH AND DISSEMINATION PROJECTS. THE SECOND PART GIVES THE ESTIMATED COSTS OF THE STUDY. (MS)



TM(L)-660

Report of Conference Assembled to Consider Recommendations Relative to a Possible Review and Assessment of Research and Dissemination Projects Conducted Under Title VII of the

20 November 1961



### U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE OFFICE OF EDUCATION

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# TECHNICAL MEMORANDUM

(TM Series)

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Report of Conference Assembled to Consider Recommendations Relative to a Possible Review and Assessment of Research and Dissemination Projects Conducted Under Title VII of the National Defense Education Act of 1958

by

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November 20, 1961

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The views, conclusions, or recommendations expressed in this document do not necessarily reflect the official views or policies of agencies of the United States Government.





The project reported on in this publication was conducted pursuant to a contract with the Office of Education, U. S. Department of Health, Education, and Welfare. The report, summarizing recommendations growing out of a conference held at the Washington, D. C. office of System Development Corporation on October 7-8, 1961 for the purpose of formulating recommendations relative to a possible review and assessment of research and dissemination projects conducted under Title VII of the National Defense Education Act of 1958, is made to the Educational Media Branch of the U. S. Office of Education.

#### Conference participants:

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## SHOULD THE UNITED STATES OFFICE OF EDUCATION UNDERTAKE AN ASSESSMENT OF THE IMPACT OF ITS TITLE VII PROGRAM ON AMERICAN EDUCATION

Since the inception of the National Defense Education Act, no formal over-all evaluation of the Title VII program has been made. The possible need for such an evaluation was the basis for holding this conference.

The first question to which the Committee addressed itself was whether the U. S. Office of Education (OE) should undertake such an evaluation. Under the Title VII program, some 150 research grants have been made including funds for studies of educational television, programmed instruction, and the development and testing of materials for the different media. Some 90 contracts have been let to support dissemination activities which are intended to provide a research information service, a bibliographic index of media, normative information on use of media, leadership training, and a body of reports. The Committee considered whether or not a systematic evaluation program should be initiated to determine the actual and probable contribution to education of 150 research studies, of which some 25 have been completed, and of the many dissemination programs now under way. The direction of future activities of the Title VII program might well depend in part on the outcome of such an assessment. It was felt that results of an evaluation program might provide the basis for answering such questions as the following:

- 1. What channels should be used for research support activities and for dissemination activities? For example, should field studies be established through State Departments of Education or through more regional groups? What kinds of activities should be channeled through professional associations? Should research centers be established?
- 2. To what extent should the USOE support directed research in contrast to nondirected research?
- 3. What types of research, in what areas, with what levels of students and with what media, should be supported?

In short, the question considered by the Committee was whether a systematic attempt should be made to determine where the United States is now with respect to educational media compared with where it might have been without the Title VII program and what implication this has for future development of Title VII activities. The judgment of the Committee concerning a possible evaluation of Title VII is reflected in the following recommendations.

1. A review and assessment of the Title VII program of research and dissemination is both desirable and feasible. Such a program should be undertaken.



- a. Projects completed and those currently in progress should be reviewed with attention to (1) internal adequacy, e.g., adequacy of design and conduct of program, judged importance of media developed and demonstrated and/or problems researched, and (2) social significance, or impact on the school, teachers, pupils, and community in terms of increased use of media, availability of improved techniques, and opinions of individuals related in various ways with the project and/or materials involved. (See also Appendix B, Item 1.)
- b. New research and/or dissemination projects undertaken under Title VII (1) should have built into their planning a provision for evaluation, and (2) should on completion be evaluated according to a prearranged plan by qualified persons. Such review and evaluation should be directed at internal adequacy of the research or dissemination project and also at the social significance of the undertaking. (See also Appendix B, Item 2.)
- 2. Research and dissemination with respect to educational media should include projects concerned with the development and testing of products that may contribute to the meeting of needs related to the national emergency. The Educational Media Branch of the U.S. Office of Education should participate in the development of such materials and in their tryout in operational settings. This will actively aid the program of education for defense and survival, in accordance with national policy. (See also Appendix B, Item 3.)

#### II. PROCEDURES RECOMMENDED FOR AN ASSESSMENT OF THE TITLE VII PROCRAM

The Committee recommended the utilization of a director for the project for assessing the impact of Title VII on education. (See also Appendix B, Item 4.) This person should be a leader of broad background, capable of using the tools of social science, including those of the historian and the sociologist. He should be adequately compensated and should be of the caliber of such people as Lee Cronbach, Paul Lazarsfeld, or Chester Harris. It is important to note that technical competence is not the only criterion for this person -- broad vision and wisdom are even more important characteristics. The project would gather data from a wide variety of sources and weave these data into a final report for submission to the U.S. Office of Education. Ideally, the report should be analogous to Abraham Flexmer's report on medical education, the Smythe Report on the Manhattan Project, or the Conant study of the American high school. The project would undertake studies of the research projects which have been completed as well as of the dissemination contracts of the Office. Estimated time required for such an evaluation is approximately one year.

Extensive use of penetrating interviews should be made. A systematic search should be undertaken to find out what happens when Title VII money is expended in an area. Both the formulation of the questions and the interpretation of answers to interview questions are critical parts of the investigation; mere tabulation of answers to questions is not sufficient to draw out the full implications of the program. People who have participated in research projects or dissemination activities can be contacted and interviewed for an assessment of the impact of the program. Grantee institutions should also be visited and appropriate personnel interviewed.

Evaluation of research projects by consultant experts in various fields will also provide an important input. Data on production, distribution and use of materials can be obtained. Expenditures by State Departments of Education and other educational organizations will provide additional data. The evaluation should also include data on the economics of the support program so that a determination might be made whether to put more money into a few projects or less money into more projects or whether alternative support plans should be adopted.

Methods for evaluating the Title VII program in contrast to other media support programs might also be used. Comparison between Title VII media studies and non-Title VII media studies can be made with respect to number and judged quality of general reports and papers, with breakdown for such groups as psychology journals, educational journals, and papers and symposia given at professional societies.

Although it is necessary to assess the Office of Education Programs which have been conducted to date, future projects, both research and dissemination, should have built-in evaluation mechanisms so that assessment will be conducted on an ongoing basis. Some projects can be tested immediately; for example, a film should be accompanied by a test on its content. Before the final research report comes out on a project, feedback to the grantee from qualified critics should be supplied. Such a review would help the researcher improve his report and would also supply the Office of Education with an immediate evaluation of the study. At the end of the dissemination program, teachers and administrators should be asked what they think of it. Such feedback should be cumulative and have a control function on subsequent proposals. Procedures for assessing the OE program should be aimed at its improvement over the next few years.

The remainder of this section consists of the Committee's suggestions for implementing the assessment. In making these suggestions, the Committee was not in any sense attempting to dictate procedures to the project director. Rather, the Committee members were making their ideas available to be used as appropriate.

#### III. POSSIBLE OUTCOMES AND EXTRAPOLATIONS TO FUTURE PROGRAMS

In attempting to determine whether a study should be conducted, a prime consideration is the utility, broadly defined, of the possible outcome. While the Committee did not formally enumerate anticipated results of the proposed study, numerous suggestions of probable findings were made during the course of the meetings. These predictions, which are summarized below, indicate that the Committee was giving serious attention to this facet of the problem. In reviewing the following presentation, the reader should keep in mind that it is not intended as a set of statements of fact. These are predictions of outcomes and, from that frame of reference, may be of value in determining whether the evaluative study should be made.

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It is predicted that an evaluation study will find that:

- 1. Title VII, including research on and dissemination of information about educational media, has served to improve instruction in public elementary and secondary schools and institutions of higher education and should be continued.
- 2. Research and dissemination projects which deal with shortterm or national emergency problems should be supported. This support should not operate to the exclusion of more long-range objectives.
- 3. There should continue to be representation of each of the various educational media among the projects supported.
- 4. Preference should be given to projects which promise to move in an orderly sequence through the following stages:
  - a. hypothesis discovery
  - b. hypothesis testing
  - c. field suitability testing
  - d. administrative logistics testing
  - e. program and media production
  - f. all-out demonstration

Preference should also be shown to studies initiated anywhere in this sequence when it is demonstrated that earlier steps have been reasonably well accomplished.

See "Recommendations for Research and Development Efforts in Programmed Instruction" (13 October 1961) by Joint Committee on Auto-Instructional Programs and Devices for AERA-APA-DAVI. These recommendations are also pertinent to points 5 and 6.

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- 5. Support should be given to investigators who are careful, insightful workers with adequate facilities for their studies.
- 6. Projects should explore new ways in which to use media rather than simply compare media with conventional methods. Attention should be given to working with young children and to teaching them subject matter other than the conventional.
- 7. Preference should be given to creative studies with high risk but high payoff rather than low risk, low payoff.
- 8. More support should be devoted to the training of research workers.
- 9. The preferred variables to be studied are psychological (e.g., cognitive or mediational) rather than grossly physical, sociological, or physiological (e.g., size of screen, size of class, sex of student). In any event, investigators should engage in explicit "psychologizing" about their work, both before and after their results have been obtained.
- 10. Studies in which time is a dependent variable should be fostered.
- 11. More effort should be expended toward disseminating research findings to educational administrators and classroom teachers.

While the preceding predictions are not all-inclusive, they should provide some concept of the range of outcomes possible from a study such as the one recommended.





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#### APPENDIX A

#### CONSIDERATIONS FOR A NATIONAL EMERGENCY EDUCATIONAL PROGRAM

Recommendations and suggestions relative to possible gaps in the program of currently sponsored research and dissemination under Title VII were discussed in two major contexts, or in light of two time perspectives: (1) a perspective which envisaged a continuing normal development of educational activities over the period of the next two decades, and (2) a perspective which recognized the cold war climate of American political and economic thinking circa 1961 and the possibility of a national emergency in the immediate future. Recognizing the second perspective and the relative state of ignorance of the population with respect to means of surviving and carrying on in the event of thermonuclear attack, the Committee suggested the active participation of the Educational Media Branch in providing instructional materials directed at civil defense, before, during, and following possible attack. It was suggested that the Educational Media Branch consider a two-pronged approach to preparation for possible national emergency:

- 1. Encouragement of research and dissemination projects geared to develop educational materials likely to be most useful in this short-time perspective and to test the effectiveness of such materials.
- 2. Direct contracting for the production of such materials as film programs which would be widely distributed to schools and communities for educating the population regarding (a) protection, (b) first aid, (c) survival, and (d) continued participation in national affairs in the event of thermonuclear attack.

It was suggested that it might be advisable to consider such programs, i.e., defense and survival, from the standpoints of different time periods (e.g., imminent attack, attack within six months, attack within one year, attack within five years) and to develop a matrix of goals and tasks relative to educational media adapted to the different time periods. With the shorter time perspective, it might be expected that attention would focus on instructions more than instructing, and in development, production and implementation more than research and study. With longer time perspective, attention might well be devoted to an increasing degree to study of the effectiveness of different kinds of materials and media, to the education of the public in protection, survival, and the like.



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#### APPENDIX B

#### ADDITIONAL SUGGESTIONS

In accordance with prior plans, the draft of the Conference Report was sent to the participants for their comments. Most of the comments made were directly useful in preparation of the final report. However, there were a few major suggestions which, if included in the body of the report, appear possibly to be at variance with the majority opinion. These suggestions constitute the content of Appendix B.

- 1. In discussing Item 1.a., Page 4, one participant suggested that it would be possible to satisfy both criteria and still not develop a body of dependable knowledge. He proposed inclusion of a third criterion for judging Title VII activities. This criterion would be "potential contribution to dependable knowledge."
- 2. One of the participants felt that recommendation (2) of Item 1.b., Page 4, poses a threat to "initiative and responsibility in responsibility in responsibility in research." This participant favored evaluation but would not prescribe "expert" evaluation as the method nor would be prescribe any single method for all projects.
- 3. One of the participants recommended an even stronger statement of Appendix A and of other suggestions related to "our national survival." In this connection, he suggested that consideration be given not only to our own civil defense but also to "projects likely to have payoff in meeting the pressing educational requirements of the uncommitted and/or underdeveloped nations of the world." This participant also recommended the "advisability of a systematic planning activity ... for the survey and analysis of educational requirements in the light of the world situation, with reference to the kind of time perspectives outlined in Appendix A ... and with the intent of developing policies, priorities and plans appropriate to the best possible estimate of contingencies in relation not only to all-out thermonuclear war but also to the prospects of a long-protracted total world struggle on all fronts, with national survival as the stake."
- 4. It was emphasized by one participant that the effort recommended by the conference requires significant organizational support. The implication of this, he felt, is that Title VII should contract with an organization which could provide or hire such an individual and could furnish him such support as he requests.



#### APPENDIX C

#### SDC EVALUATION

Analysis of the problems confronted in considering the desirability of a thorough review and assessment of projects initiated under Title VII of the National Defense Education Act convinces the Educational Research and Development staff of System Development Corporation that any attempt at such an assessment should include an overview of the entire field of education, with focus on the field of educational media. The more complete this overview, the more valuable will be the evaluation of Title VII projects.

Balanced against the need for an overview of education as a foundation for an appraisal of Title VII projects is the time factor. To be of maximum value to those recommending future Office of Education work with educational media, the proposed evaluation of Title VII projects should be completed as expeditiously as possible.

In an endeavor to satisfy both requirements -- (1) an early report (2) based on an extensive view of education -- the following study, with estimated cost, is recommended by SDC. Part I consists of the recommendation of work to be done. Part II gives an estimate of cost.

#### I. RECOMMENDED WORK

#### A. Overview of Education

Of the several recommendations of Appendix C, this "overview of education" is the most difficult, the most time-consuming and the most expensive. It also is indispensable for attainment of the goals of an evaluation. Although an appraisal of the present status of educational media and its relationship to Title VII work undoubtedly would be of value, the real key to the SDC recommendations is an overview of education in general. Only as the totality of education is examined can the specific roles of educational media and Title VII projects in particular be viewed with precision. Furthermore, to give real meaning to an examination of education, it is necessary that this scrutiny involve the future as well as the past and the present.

To accomplish this goal, it is recommended that a number of exceptionally bright, capable, creative education-oriented individuals be brought together for an extended period of time, be asked to examine the current educational scene,



and be requested to give a description of what education should be ten years from now. (Such scholars could probably obtain two-year leaves from their institutions for participation in such a study.) These carefully chosen persons should have access to facilities and personnel for conducting research which may be critical to their deliberations. This aspect of the study, which would run concurrently with the analyses noted in recommendations B and C below, would require perhaps two and one-half years to complete.

This aspect of the appraisal would provide:

- 1. A summary statement of the current status of American education. (This could be based in part on work already completed by other groups.)
- 2. A recommendation for future direction of American education.
- 3. A statement of the idealized role of educational media.

#### B. Educational Media

It is recommended that an analysis be made of the current status of educational media. This would begin at an early date and might require approximately 18 months to complete. A report from this analysis would include:

- 1. A description of available media.
- 2. A review of recent research, perhaps since 1950.
- 3. A description of the status of dissemination of information concerning educational media.
- 4. An account of the present utilization of educational media.

#### C. Analysis of Title VII Research and Dissemination Projects

It is recommended that a detailed, analytical report be prepared of both the research and dissemination aspects of Title VII. This work would also begin at a very early date, and would run concurrently with the analysis of educational media, thus enabling the two projects to provide feedback to each other. A comprehensive report of this examination would include summarizations and recommendations based upon:



- 1. Intensive interviewing of a representative sample of individuals receiving research grants and dissemination contracts.
- 2. Gathering of questionnaire information from all grant and contract recipients.
- 3. Evaluation of research projects by competent consultants.
- 4. Assessing effect of the dissemination program through analysis of such sources as distribution lists, through questioning samples of those receiving media information under the Title VII dissemination program, etc.

It is envisaged that the three aspects of the proposed evaluation would begin at approximately the same time and would proceed concurrently. The comprehensive review of education would, however, require longer to complete. In the final report of the comprehensive review a rapprochement would be attempted between the thinking in this area and that involved in the more limited aspects of the evaluation, i.e., the analysis of educational media and the analysis of Title VII research and dissemination projects.

#### II. ESTIMATED COST

Although any financial figures suggested are of necessity rough estimates, it is believed that, within the time limitations imposed, reasonable progress could be made by the agency engaged to accomplish the defined goals with a budget approximating that which follows.

